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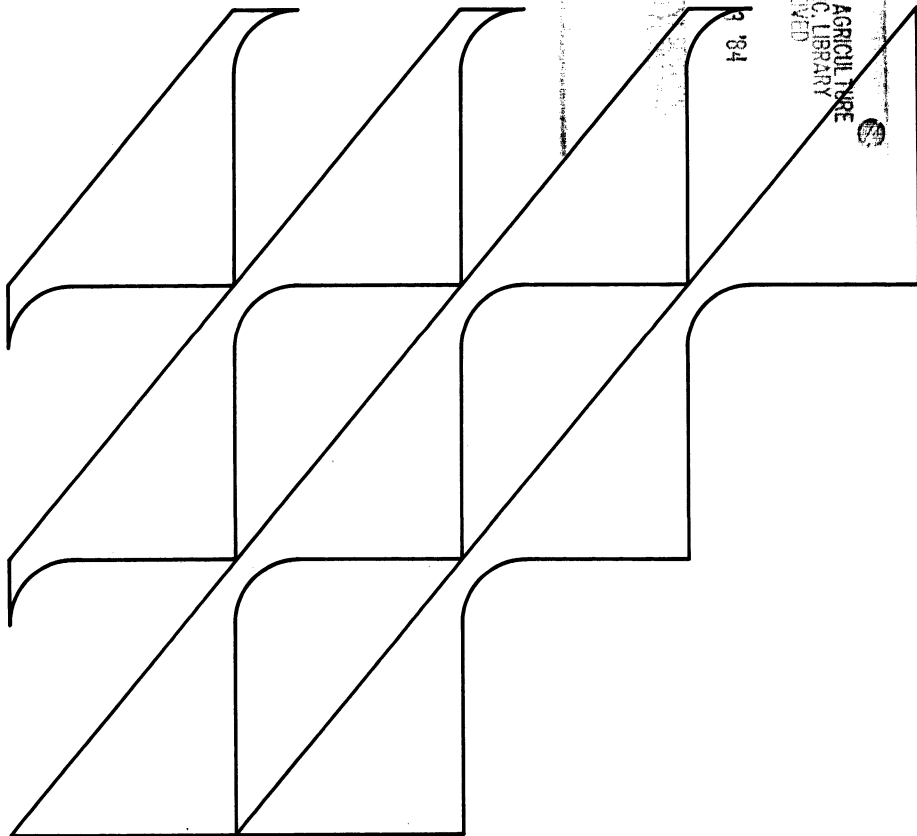
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Changing Trends in the Red Meat Distribution System

Lawrence A. Duewer

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ABSTRACT

Meat wholesalers, grocery retailers, and food service firms are becoming fewer in number but larger in size. Direct sales from packer to retailer are decreasing the number of meat wholesalers. The growth of boxed beef is contributing to the shift to more direct sales from packer to retailer. Away-from-home consumption of red meat is increasing slowly in relation to at-home consumption. Chains are gradually taking more of the grocery retailing and food service industry market. Fast food outlets are the fastest growing segment of the food service industry.

KEYWORDS

Meat, distribution, wholesalers, retailers, restaurants, trends, beef, pork

Note: Use of company names in this publication is for identification only and does not imply endorsement by the U.S. Department of Agriculture.

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GLOSSARY

| | |
|-----------------------------------|---|
| <u>Beef Breaking</u> | The breaking (cutting) of carcasses into primals, subprimals, or both. |
| <u>Boxed Beef</u> | Beef cut into primals, subprimals, or both; vacuum-wrapped, and placed in cartons by the packer. |
| <u>Chain Warehouse</u> | Central plant used by a chain retail firm to assemble, store, and distribute a product to local stores. This facility may also cut or process meat. |
| <u>Fabrication</u> | Breaking and cutting of meat from carcasses into retail cuts, wherever done and whether done partly or entirely. |
| <u>Food Service Outlets</u> | Firms that sell food for away-from-home consumption. Includes restaurants and institutions. |
| <u>Formed Steaks</u> | Steaks formed by a machine into a specific shape. Raw material fed into the machine is usually chunked or flaked. |
| <u>Meat Distribution</u> | The movement of meat from packer to consumer. Includes fabricating, wholesaling, and retailing functions. Retailers include both grocery and food service firms. |
| <u>Packers</u> | Firms that slaughter livestock. These firms may or may not fabricate products, process, or perform other functions. |
| <u>Portion-Controlled Product</u> | A cut of meat that has been individually wrapped to meet certain weight (and perhaps other) specifications. |
| <u>Primals</u> | Major divisions of the carcass. For example, rounds, loins, and chucks are primals from a beef carcass. |
| <u>Retail Outlet</u> | A store that sells meat for home or away-from-home consumption. A partial list of types of retail outlets follows: |
| Chain Grocers | Retail grocery firms that own 11 or more grocery stores. Meat sold by these stores is usually for at-home consumption. |
| Independent Grocers | Retail grocery firms that have 1 to 10 stores. Meat sold by these stores is usually for at-home consumption. |
| Fast Food Restaurants | Firms that sell prepared, ready-to-eat food for consumption on or off the premises and that do not provide table service. These firms may be either part of a chain or independently owned. |
| Chain Restaurants | Food service firms with more than 10 outlets. |
| Table Service Restaurants | Firms that have tables or booths and waiters or waitresses providing sit-down service. These firms include the more expensive quality restaurants. |
| Institutions | Firms that provide meal service as a part of other services—for example, hospitals and college dormitories. |

Subprimals

Smaller cuts than primals, but not retail cuts. For example, top rounds, bottom rounds, and knuckles are subprimals from the beef round.

Wholesaling

The broad operation in which firms buy and sell meat to other firms. A partial list of types of wholesalers follows:

- Packer Sales Offices The local sales organizations for packers that do not physically handle meat but that act as salespeople and troubleshooters.
- Direct Sales Sales packers make directly to retail firms with one or the other or both assuming wholesaling roles or functions.
- Purveyors Firms that buy meat, do some fabricating, and resell to other firms. Some cutting distinguishes these firms, but they may also handle other product lines and perform other services.
- Distributors Firms that procure a product in large quantities, hold it in a cold storage warehouse, and then distribute it to their customers without cutting or changing the product in any way.

SUMMARY

Meat wholesalers, grocery retailers, and food service firms are decreasing in number but increasing in average size. Direct sales from packer to retailer are decreasing the number of meat wholesalers. Away-from-home consumption of meat is increasing slowly in relation to at-home consumption.

Meat wholesalers are finding less total demand for their services. Boxed beef sales now constitute a majority of packer beef sales, allowing grocery wholesalers and distributors to handle beef as they handle other commodities (except for the refrigeration of the beef). Per capita red meat consumption is no longer growing, and stability is the prospect in the coming years. However, boxed pork sales are growing. Meat wholesalers and purveyors are being forced either to serve only specialty markets or to become bigger and more efficient to compete.

Fast food firms are the fastest growing segment of the food service industry. Although the number of convenience grocery stores has increased, their meat sales are minimal. Although independent grocers and some independent food service firms are competing well, a greater percentage of the market will eventually go to chain operations. Chains are more likely to perform their own wholesaling function. Changes in the structure of the meat distribution system thus represent not merely growth, but adaptations to changing consumer demand.

Changing Trends in the Red Meat Distribution System

Lawrence A. Duewer*

INTRODUCTION

Both producers and consumers tend to blame the marketing process for low livestock prices and high meat prices. Their concept or knowledge of this process is often hazy. This report provides information about wholesalers, retailers, and meat movement. The structure and trends of the meat distribution industry are described and explained.

Objectives of this research include:

1. Assembling into one study the available information on the U.S. meat distribution system--wholesaling, retail grocery, and food service firms.
2. Examining changes occurring in product form and meat movement as a result of technology, costs, and consumer preferences.
3. Increasing public understanding and awareness of the meat distribution function, its present structure, and future trends.

The vast and complex meat distribution system is a dynamically changing process whose function of moving meat to the consumer remains the same but whose methods change over time. Even though slaughterers now cut more of the meat produced, the distribution system continues to include the functions of breaking, cutting, and processing meat to satisfy consumers. This process sometimes includes cooking the meat and delivering it to consumers' tables. Consumers spent almost \$85 billion for meat products in 1981. About \$53 billion was for beef and \$30 billion was for pork.

Meat distribution involves two main functions: wholesaling and retailing. Wholesaling involves both the transporting and the transferring of ownership of the meat from the packer to the final retail outlet (which sells it to the consumer). Retailing

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includes all types of restaurants, institutions, and grocery firms that sell or provide meat to the consumer. Retailing involves both grocers who sell meat, usually unprepared, for consumption at home, and food service outlets who sell meat (usually ready-to-eat) for consumption away from home.

Meat production and consumption are widely separated geographically, and much processing occurs between the farm and the consumer's plate. The packing industry is located in production areas far from the main population (and hence consumption) centers. Today's consumers want either to buy meat at a convenient location in a meal-size package for consumption at home or to eat a completely prepared meal away from home.

HISTORY OF MEAT DISTRIBUTION

At one time, livestock were raised or purchased live, slaughtered, and consumed by a single family. The first formal distribution channel was a local shop that bought animals and sold meat to consumers. As cities grew, meat markets began to buy meat from firms that specialized in slaughtering. The meat wholesaler entered the process to provide a link between the packer and the retail outlet.

The number and size of firms involved in meat distribution are affected by both horizontal and vertical dimensions. The horizontal dimension refers to a few large firms or many small firms performing the same task. During the past 30 or 40 years, the trend has been away from many small firms toward fewer, larger firms. The vertical dimension refers to one firm's coordination or control over several stages or tasks. When a retail grocery firm performs its own warehousing and delivery function, it has vertically integrated into wholesaling. This vertical integration also affects the horizontal configuration of firms.

As firms grow larger, they generally tend to control more functions; with increased volume, they can do so more efficiently. Packer branch houses are wholesale units located in consumption areas. Although packers have grown larger, branch house numbers decreased from nearly 1,200 in 1929 to 435 in 1977. Some of these branch houses were converted to sales offices (which do not physically handle products), but most were displaced by the packing houses making direct sales to retailers via telephone. Grocery chains and fast food chains, in particular, have grown larger and buy more meat directly from the packer. Thus, packers maintain their sales function and perform it more efficiently, but avoid some handling of small quantities of meat.

The development and growth of boxed beef have also influenced the functions performed by wholesalers, the number and size of wholesalers, and the amount of beef moving directly from a packer to a retail firm. About 55 percent of U.S. beef is now boxed before it leaves the packing plant. Nearly 90 percent of it is boxed as it enters the local retail grocery store. Some

wholesaling and retailing firms cut purchased carcass beef into primals or smaller cuts before delivery to the local outlet.

A few years ago, retail grocery chains debated whether to build central beef-breaking facilities or to continue breaking beef in the local store. Now, chains are opting to buy boxed beef and are using central facilities only as warehouses. Chains that already have central breaking operations may continue using these facilities, however. Safeway, the largest chain, has closed all but one of its fabricating warehouses. A & P buys all boxed beef. American stores represent a special situation, as they have been integrated into slaughtering. Kroger, Winn-Dixie, Lucky, and Jewell, among the top 10 chains, buy most of their beef as carcasses and do their own breaking. Cooperative and affiliated wholesalers serving independent grocers have used boxed beef to add meat to their wholesaling services. This procedure cuts out specialized meat wholesale firms that previously supplied independent grocers, as the grocery wholesalers are large enough to buy directly from packers. Purveyors (a type of wholesalers) have also found less demand for their cutting services, as all types of retail outlets have found they can buy beef already broken into primals or subprimals as boxed beef. Many smaller wholesale firms were forced out of business as they were less able to adapt to changing conditions.

Americans are eating more food--and more meat--away from home. Americans spent 37 percent of their food dollar on meals and snacks away from home in 1981, versus 26 percent in 1960 (13).^{1/} U.S. Department of Agriculture (USDA) marketing bill data indicate that in 1981 food eaten away from home took 30 percent of consumer expenditures and accounted for 18 percent of the farm value of food (3). The latter is a better indicator of volume movement. The away-from-home component of beef farm value increased from 26 percent in 1967 to 27 percent in 1981 (table 1). Pork increased from 16 percent to 20 percent during the same period. The growth of fast food operations contributed substantially to these increases. Rising income was the major factor in more consumption away from home, but the higher percentage of women working outside the home, changes in lifestyle, and a greater demand for convenience also contributed to this trend. The trend affected numbers and sizes of food service firms, but the grocery industry has also changed. The fast food industry gained the most.

CONSUMPTION TRENDS

Trends in consumption are important because they indicate the amount of meat moving through the distribution system and thereby indicate the need to increase or decrease overall capacity. Because total red meat consumption reflects population growth, per capita consumption data are used (table 2). Both cattle and hog production have demonstrated a cyclical pattern over the years, resulting in variations from the overall trend.

^{1/} Underscored numbers in parentheses refer to items in the references at the end of this report.

Table 1--Consumer expenditures for domestically produced beef and pork, estimated marketing bill, and farm value

| Item and year | Beef | | | Pork | | |
|------------------------|--------|---------|------------|--------|---------|------------|
| | Total | Eaten | Eaten away | Total | Eaten | Eaten away |
| | | at home | from home | | at home | from home |
| <u>Million dollars</u> | | | | | | |
| Consumer expenditures: | | | | | | |
| 1967 | 15,512 | 8,198 | 7,314 | 9,824 | 7,525 | 2,299 |
| 1970 | 19,903 | 9,417 | 10,486 | 12,431 | 9,348 | 3,083 |
| 1975 | 28,643 | 12,468 | 16,175 | 16,844 | 11,584 | 5,260 |
| 1976 | 34,341 | 16,306 | 18,035 | 18,977 | 13,894 | 5,083 |
| 1977 | 36,068 | 15,711 | 20,357 | 20,206 | 14,203 | 6,003 |
| 1978 | 42,276 | 19,792 | 22,484 | 22,965 | 16,502 | 6,463 |
| 1979 | 47,313 | 22,681 | 24,632 | 27,366 | 20,119 | 7,247 |
| 1980 | 49,179 | 22,159 | 27,020 | 28,618 | 20,566 | 8,052 |
| 1981 | 53,135 | 23,963 | 29,172 | 29,569 | 20,801 | 8,768 |
| Marketing bill: | | | | | | |
| 1967 | 8,149 | 2,740 | 5,409 | 6,259 | 4,519 | 1,740 |
| 1970 | 10,390 | 2,480 | 7,910 | 8,143 | 5,777 | 2,366 |
| 1975 | 15,832 | 4,232 | 11,600 | 9,536 | 5,665 | 3,871 |
| 1976 | 20,191 | 6,322 | 13,869 | 11,828 | 7,721 | 4,107 |
| 1977 | 21,860 | 5,664 | 16,196 | 13,497 | 8,746 | 4,751 |
| 1978 | 23,225 | 5,936 | 17,289 | 14,954 | 9,971 | 4,983 |
| 1979 | 25,181 | 6,251 | 18,930 | 19,156 | 13,329 | 5,827 |
| 1980 | 27,352 | 6,368 | 20,984 | 20,519 | 13,980 | 6,539 |
| 1981 | 31,037 | 7,821 | 23,216 | 21,501 | 14,335 | 7,146 |
| Farm value: | | | | | | |
| 1967 | 7,370 | 5,470 | 1,900 | 3,572 | 3,016 | 556 |
| 1970 | 9,513 | 6,945 | 2,568 | 4,286 | 3,573 | 713 |
| 1975 | 12,725 | 8,142 | 4,583 | 7,251 | 5,859 | 1,392 |
| 1976 | 14,043 | 9,852 | 4,191 | 7,098 | 6,110 | 988 |
| 1977 | 14,166 | 9,973 | 4,193 | 6,700 | 5,439 | 1,261 |
| 1978 | 19,194 | 14,048 | 5,146 | 8,030 | 6,564 | 1,466 |
| 1979 | 22,131 | 16,430 | 5,701 | 8,209 | 6,790 | 1,419 |
| 1980 | 21,827 | 15,791 | 6,036 | 8,099 | 6,586 | 1,513 |
| 1981 | 22,098 | 16,142 | 5,956 | 8,067 | 6,445 | 1,622 |

Per capita beef consumption reached a peak in 1976. Because of the time it takes to produce an animal and feed it to market weight and because of producers' responses to price levels, both beef and pork production (and the resulting consumption levels) have historically followed fairly consistent patterns. Beef cycles last about 10 years and pork cycles about 4 years. Peak beef consumption levels have increased each cycle since the fifties. The next peak consumption year (in perhaps 1986 to 1988) will probably not reach the 1976 peak because consumers may have reached their physical consumption limits and economic conditions will have led them to seek substitutes (mainly poultry). Per capita pork consumption has been nearly steady over the years except for cyclical trends. However, population increases indicate a slow upward trend in total consumption and, thus, in the amount of pork distributed. Total red meat consumption, along with beef, also peaked in 1976. Although dropping steadily since 1976, red meat consumption levels are still above 1955 levels. Future red meat per capita consumption may remain fairly steady, as consumption of poultry and fish has increased in relation to that of red meat, and will likely maintain this gain.

Consumption trends for all beef and all pork do not explain some of the trends in type of beef or pork consumed. Beef consumption increased as feedlot finishing of cattle expanded. The recent growth of the fast food industry has boosted ground beef consumption in relation to consumption of table cuts. Because of the significant shift to the meat-type hog, a much

Table 2--Per capita consumption of red meats,
retail weight

| Year | Beef | Veal | Pork | Lamb and mutton | Total red meat |
|---------------|------|------|------|--------------------|-------------------|
| <u>Pounds</u> | | | | | |
| 1955 | 60.7 | 7.8 | 61.9 | 4.1 | 134.5 |
| 1960 | 63.0 | 5.1 | 60.3 | 4.3 | 132.7 |
| 1965 | 73.6 | 4.3 | 54.7 | 3.3 | 135.9 |
| 1970 | 84.0 | 2.4 | 62.3 | 2.9 | 151.6 |
| 1975 | 87.9 | 3.4 | 50.7 | 1.8 | 143.7 |
| 1976 | 94.4 | 3.3 | 53.7 | 1.6 | 153.0 |
| 1977 | 91.8 | 3.2 | 55.8 | 1.5 | 152.3 |
| 1978 | 87.2 | 2.4 | 55.9 | 1.4 | 146.9 |
| 1979 | 78.0 | 1.7 | 63.8 | 1.3 | 144.9 |
| 1980 | 76.5 | 1.5 | 68.3 | 1.4 | 147.7 |
| 1981 | 77.2 | 1.6 | 65.0 | 1.4 | 145.2 |
| 1982 | 77.2 | 1.7 | 59.0 | 1.5 | 139.4 |

leaner pork product is now consumed. Consumers have also sought to buy more meat products that require less preparation and cooking before they can be consumed, which is part of the reason for the shift to away-from-home consumption and for greater increases in the marketing bill in relation to the farm value of food (table 1).

The wholesaling operation includes the movement of meat from slaughterers to retailers (both grocers and food service firms) and to export. Various types of firms may be involved in this movement. More retailers are making direct purchases from packers, which means either the slaughterer or the retailer performs the wholesaling functions. Transportation is an essential wholesaling function. Although most meat is now transported by truck, 50 years ago most meat moved by rail from packing plant to the city where it was consumed. Many wholesalers now do their own transporting. They pay for the transportation directly, or the meat price they pay is increased by the cost of transportation.

Table 3--Number of meat merchant wholesalers,
by census region, 1972 and 1977,
and percentage changes

Source: (12).

the entire 1929-77 period, whereas the number of agent, broker, and commission agent firms has increased. Direct sales by phone have also increased. Although the data combine packer sales offices and packer branch offices, these two types of firms have changed markedly. Branch offices physically handle the meat, while sales offices send orders to the plant to be filled. Branch offices were used almost entirely in the past, but were gradually phased out. In some cases, branch offices were replaced with sales offices, particularly for firms selling pork products under a brand name.

Agents, brokers, and commission agent firms operate like packer sales offices, but they are independently owned. They sell meat for packers without taking ownership of or physically handling the meat, and they are paid according to their sales levels. Their number has increased (table 4).

The number of meat merchant wholesalers is decreasing (table 3). These meat merchant wholesalers are mainly distributors--that is, firms that buy a product, store it in their warehouse, and then sell and deliver the product. The decrease has been fairly uniform throughout the United States, except for the South in 1972 and the South Atlantic and Mountain States in 1977. Total sales for meat merchant wholesalers increased from 1963 to 1977 in actual dollars. When sales figures were corrected for inflation by use of the Producers Price Index for finished consumer meats, total sales in 1977 (\$17.5 billion)

Table 4--Number of U.S. establishments and dollar volume of shipments and sales of packer branch offices, merchant wholesalers, and merchandise agents, by census year

| Census year | Establishments | | | Shipments and sales | | |
|----------------|-----------------------------|---------------------------------|-----------------------|-----------------------------|---------------------------------|-----------------------|
| | Packer branch offices | Meat merchant wholesalers | Merchandise agents | Packer branch offices | Meat merchant wholesalers | Merchandise agents |
| | | | | | | |
| | -----Number----- | | | -----Million dollars----- | | |
| 1929 | 1,157 | 2,225 | --- | 1,923 | 690 | --- |
| 1939 | 940 | 2,552 | --- | 1,091 | 520 | --- |
| 1948 | 756 | 3,200 | --- | 2,810 | 1,977 | --- |
| 1954 | 664 | 4,357 | --- | 2,697 | 2,866 | --- |
| 1958 | 522 | 4,482 | 154 | 2,263 | 3,891 | 609 |
| 1963 | 577 | 5,170 | 134 | 2,446 | 5,371 | 810 |
| 1969 | 616 | 5,041 | 163 | 2,811 | 7,395 | 853 |
| 1972 | 464 | 4,847 | 245 | 4,251 | 12,611 | 1,471 |
| 1977 | 435 | 4,443 | 247 | 5,843 | 17,487 | 1,681 |

--- = Not available.

Source: (11).

were above those for 1972 (\$16.7 billion). Sales per firm increased in real terms from less than \$3.5 million in 1972 to more than \$3.9 million in 1977, reflecting the existence of fewer firms.

Processors might also be considered as wholesalers as they may sell directly to retailers or have their own sales offices. Many packers do their own processing, but the processors discussed in this report are those under the standard industrial code (SIC) 2031, "Sausage and Other Prepared Meats." The census of manufacturers reports these data. Processed meat plants in the United States peaked at almost 1,500 firms in 1958, but the 1963 decrease to 1,341 firms seems to have stabilized. There were 1,374 firms in 1967, 1,311 firms in 1972, and 1,345 firms in 1977. Since 1963, the number of processing plants has grown in the South and West North Central regions, but has decreased in other regions.

The total value of shipments of all processing plants increased from \$4.6 billion in 1972 to \$8.5 billion in 1977. If one corrects for inflated dollars, 1972 figures become \$6.1 billion; thus, the real growth from 1972 to 1977 was 39 percent.

A recent USDA study examined meat movement in six southern metro areas (2). This study made the following observations concerning wholesalers: (1) more meat is now sold directly from packer to final outlet; (2) wholesalers are adjusting to changing distribution patterns to remain viable by decreasing in number, enlarging and expanding their sales area, and adding more product lines; and, (3) many smaller outlets prefer dealing with local suppliers, partly because only local suppliers will service small orders. Table 5 indicates the relative importance of types of wholesalers by indicating the percentage of meat moving through each type of wholesaler in the six southern metro areas.

Table 5--Relative importance of types of wholesalers
in six southern metro areas, beef and pork, 1979

| Type | Beef | Pork |
|----------------------|------|------|
| Packer sales offices | 26 | 50 |
| Purveyors | 22 | 7 |
| Processors | 14 | 10 |
| Other wholesalers | 8 | 33 |
| Total | 70 | 100 |

Source: (12).

As the system switches from transporting carcasses to transporting boxed beef, more beef will move directly from packer to final outlet or to the final outlet warehouse in the case of chain operations. Purveyors who specialize in breaking carcasses find their services in less demand. To adjust, purveyors have expanded their product lines or expanded their specialized cut and portion control operations. Voluntary and cooperative wholesalers servicing dry grocery and other needs of independent retail grocers have added boxed beef to their product lines, putting further pressure on existing meat wholesale operations.

Larger packers are making more direct sales by phone rather than maintaining branch houses or sales offices. Pork packers and processors are now the main users of sales offices which specialize in branded products. Packers may need local representatives to keep their brand popular and to supervise local merchandising. Some meat packers are now hiring separate firms, such as brokers, to act as their sales agents.

Although processors still manufacture specialized products, many have also begun to manufacture hamburger patties. As fast food operations have grown, the demand for hamburgers has increased.

Many chain grocer, restaurant, and fast food operations are now performing their own local storage and delivery functions. By doing their own wholesaling, they are decreasing the amount of meat that moves through other wholesale channels.

The shift to more direct sales from packer to final outlet chain will likely continue. Meat wholesalers will also likely continue to cut less and perform only the warehousing, selling, and delivery functions. However, the demand for local wholesalers to serve small, final outlets and restaurants that want special cuts and service will continue.

RETAIL GROCERY OPERATIONS

Retail foodstores represent one of the Nation's largest business sectors, both in number and sales. Grocery stores had sales of \$252 million in 1982 (table 6), compared with \$101.7 million in 1972. However, if sales are deflated by the Consumer Price Index, real growth from 1972 to 1982 was only 10.7 percent (8).

Grocery store numbers, sales, and other information can be employed as a substitute for meat sales. Meat represents one part of the total list of items sold in grocery stores; as these stores' characteristics change, so do the meat statistics. Sales of fresh meat, poultry, and provisions as a percentage of grocery store sales were nearly stable over the 1972-81 period.^{2/} For example, sales of fresh meat, poultry, and provisions were 21.53 percent of total grocery store sales in 1972 and 21.23 percent in 1981 (table 7). Although the

^{2/} The term "provisions" means all processed meat products--for example, hot dogs, salami, and bacon.

Table 6--Number and percentage of grocery stores,
by type of store and sales volume, 1982

| Type of store and sales volume | Stores | Total sales |
|-----------------------------------|--------|-------------|
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1/ Supermarkets are defined as firms with at least \$2 million annual sales.

2/ Annual sales of \$1 million to \$1,999,999.

3/ Annual sales of less than \$1 million.

4/ Excludes sales of gasoline.

Source: (8, Apr. 1983 issue).

way meat is handled in grocery stores may have changed, the sales of these meat items in relation to other items sold in these stores has remained about the same. This finding supports the assumption that meat sales do parallel total grocery sales.

The total number of grocery stores in the United States decreased from 446,350 in 1940 to 162,000 in 1982 (table 8), but the average store size increased tremendously. The average grocery store had sales amounting to \$20,186 in 1940 and \$1,555,556 in 1982. When corrected for inflation, the 1982 figure is about \$225,000, still more than a tenfold increase. In 1982, the average chain supermarket was 25,964 square feet, and the average independent supermarket was 17,715 square feet. Ten years earlier, the average new chain supermarket was only 19,240 square feet, which was twice the average new store size in the early sixties (8, Apr. 1973 and Apr. 1983 issues).

The percentage supermarkets are of all grocery stores is another measure of store size. The most common definition of a supermarket is a grocery store with sales of a certain level. Both inflation and expanding store size have changed the sales level needed for a store to be classed as a supermarket (table 9). In 1965, a store needed only \$500,000 in sales to be a supermarket; now it needs \$2 million. Although the percentage

Table 7--Value and percentage of meat sold in grocery stores, by type of meat, 1972, 1976, 1981

| Item | 1972 | 1976 | 1981 |
|---|--------|--------|--------|
| <u>Million dollars</u> | | | |
| Fresh meat, poultry, and provisions sales <u>1/</u> | 20,084 | 29,109 | 46,920 |
| <u>Percent</u> | | | |
| Meat sales as a percentage of total store sales | 21.53 | 21.07 | 21.23 |
| Percentage of total meat sales | 100 | 100 | 100 |
| Beef, fresh | 40 | 39 | 45 |
| Lamb, fresh | 3 | 2 | 2 |
| Pork, fresh | 8 | 9 | 9 |
| Veal, fresh | 3 | 3 | 1 |
| Poultry | 12 | 11 | 12 |
| Provisions <u>1/</u> | 34 | 36 | 31 |

1/ Provisions are cured meats and sausage products.

Source: (9, 10).

Table 8--Number and annual sales of grocery stores, by type of store 1/

| Item and year | Independent | | | Chain | Grand total |
|------------------|-------------|--------------|------------------------|-------------|-------------|
| | Affiliated | Unaffiliated | Total | | |
| | | | <u>Number</u> | | |
| Stores: | | | | | |
| 1940 | 108,750 | 296,250 | 405,000 | 41,350 | 446,350 |
| 1945 | 94,000 | 271,000 | 365,000 | 33,400 | 398,400 |
| 1950 | 122,000 | 253,000 | 375,000 | 25,700 | 400,700 |
| 1955 | 101,000 | 223,500 | 324,500 | 18,800 | 343,300 |
| 1960 | 84,000 | 156,000 | 240,000 | 20,050 | 260,050 |
| 1965 | 76,000 | 128,200 | 204,200 | 22,850 | 227,050 |
| 1970 | 69,400 | 104,700 | 174,100 | 34,200 | 208,300 |
| | Independent | Chain | Convenience | Total | |
| | | | | | |
| | | | <u>Number</u> | | |
| 1975 | 143,730 | 23,080 | 25,000 | 191,810 | |
| 1980 | 112,600 | 18,700 | 35,800 | 167,100 | |
| 1981 | 108,130 | 19,070 | 37,800 | 165,000 | |
| 1982 | 104,970 | 18,330 | 38,700 | 162,000 | |
| | Independent | Chain | Convenience | Grand total | |
| | Affiliated | Unaffiliated | Total | Chain | total |
| | | | | | |
| Annual sales: 2/ | | | <u>Billion dollars</u> | | |
| 1940 | 2.740 | 3.090 | 5.830 | 3.180 | 9.010 |
| 1945 | 4.700 | 5.300 | 10.000 | 5.350 | 15.350 |
| 1950 | 8.900 | 8.050 | 16.950 | 10.140 | 27.090 |
| 1955 | 15.500 | 9.655 | 25.155 | 14.260 | 39.415 |
| 1960 | 25.400 | 6.750 | 32.150 | 19.550 | 51.700 |
| 1965 | 31.800 | 6.100 | 37.900 | 27.205 | 64.925 |
| 1970 | 39.390 | 6.950 | 46.340 | 42.075 | 88.415 |
| | Independent | Chain | Convenience | Total | |
| | | | | | |
| | | | <u>Billion dollars</u> | | |
| 1975 | 70.300 | 66.750 | 5.480 | 142.530 | |
| 1980 | 105.285 | 103.115 | 12.400 | 220.800 | |
| 1981 | 106.875 | 119.905 | 14.120 | 240.900 | |
| 1982 | 111.318 | 125.582 | 15.100 | 252.000 | |

1/ Reporting of the data changed in 1973. This change is indicated by the new headings. Before 1952, chains were 4 or more stores; after 1952, chains were defined as firms operating 11 or more stores.

2/ Gasoline sales are not included.

Source: (8, Apr. 1981, 1982, and 1983 issues).

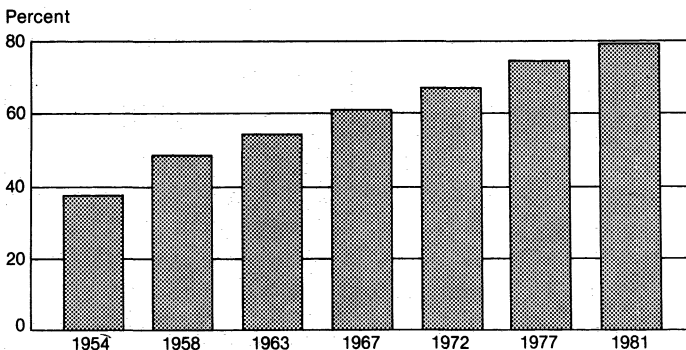
of sales by supermarkets has fluctuated as the definition has changed, it remains in the 70- to 80-percent range. The separation of convenience stores into a separate designation has reduced the percentage in other categories. Note that only 17.9 percent of the stores were classified as supermarkets in 1981, but they accounted for 71.7 percent of all grocery sales. The number of small stores is decreasing, despite their larger size according to the definition of "small."

A second definition of a supermarket is a grocery store with 20 or more employees; this definition avoids the problem of inflation. The percentage of supermarket sales to total grocery sales has steadily increased, from 40 percent in 1954 to nearly 80 percent in 1981 (fig. 1). The size of the average supermarket continues to grow. During 1980 and 1981, over half of the new stores that opened were superstores (over 30,000 square feet, with large nonfood selections). ^{3/}

The decline in the number of small stores and the increase in average size is related to firm type or store ownership. The decline occurred among single-store firms as the market share of multistore firms expanded. The market share of single-store firms fell from 52 percent to 29 percent during the past 22 years, whereas the market share of firms with 101 or more stores rose from 29 percent to 41 percent (table 10). Sales by chains (firms with 11 or more stores) now account for about half of all grocery store sales (table 6). The market share for the

Figure 1

Share of Grocery Store Sales Accounted for by Supermarkets



Supermarkets are defined as grocery stores with 20 or more employees.

Source: (11), for years 1954 - 77; 1981 is a U.S. Department of Agriculture (USDA) estimate.

This figure was prepared by Charles R. Handy, National Economics Division, Economic Research Service, USDA.

^{3/} Material developed by, and obtained from, Charles R. Handy, National Economics Division, Economic Research Service, U.S. Department of Agriculture.

20 leading chains has been relatively stable since 1958, rising from 34 to 36 percent (table 11). The market share of the 8 largest (and particularly the 4 largest) chains actually dropped since 1958, which means that the remaining 12 showed the most growth. Individual firms may have changed groupings during this period.

Many studies have examined concentration ratios in relation to various characteristics of the grocery industry. These studies will not be reviewed here. However, one of these studies, by Grinnell, Parker, and Rens, considers concentration issues by metropolitan area (5). After listing studies related to market concentration and measures of market performance, the authors conclude:

Although some controversy remains, these studies, which have been based on widely different kinds of data sets for different time periods, have generally concluded that prices and profits are directly related to market concentration (5, p. 6).

Independent grocers are not synonymous with small grocers. In 1982, there were 11,400 independent supermarkets with over \$2 million in sales (table 6). According to data in Progressive Grocer, independents sold 44.2 percent of total grocery sales (8). This figure was down from 49.3 percent in 1975 and down from higher percentages in earlier years. Percentages of meat sales by independents are probably similar to percentages of total grocery sales. Independent stores are very competitive and are still an important factor in the market. They have associated themselves with wholesale suppliers, created cooperative wholesale units, or have joined wholesaler-sponsored

Table 10--Shares of total grocery store sales accounted for by firms of various sizes 1/

| Size of firm | Census years | | | | | |
|----------------------------|--------------|-------|-------|-------|-------|-------|
| | 1954 | 1958 | 1963 | 1967 | 1972 | 1977 |
| Number of stores per firm: | Percent | | | | | |
| 1 | 51.8 | 47.0 | 43.1 | 38.8 | 32.2 | 28.6 |
| 2 or 3 | 4.8 | 4.8 | 5.0 | 5.0 | 5.1 | 5.1 |
| 4 or 5 | 1.6 | 1.9 | 1.9 | 1.8 | 2.5 | 2.9 |
| 6 - 10 | 2.4 | 2.4 | 2.9 | 3.0 | 3.2 | 3.7 |
| 11 - 25 | 3.6 | 3.3 | 4.2 | 5.2 | 4.8 | 5.7 |
| 26 - 50 | 4.0 | 4.4 | 3.2 | 4.1 | 6.1 | 6.1 |
| 51 - 100 | 2.4 | 4.0 | 5.2 | 6.0 | 6.5 | 7.1 |
| 101 or more | 29.4 | 32.2 | 34.5 | 36.1 | 39.6 | 40.7 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

1/ Data for 1954-77 are from (11). Table development was by Charles R. Handy, National Economics Division, Economic Research Service, U.S. Department of Agriculture.

voluntary groups to take advantage of large-scale buying and merchandising. In the 1- to 2-million-dollar size category, independents had 7,370 stores in 1982 in contrast to only 850 chain stores.

Convenience stores grew rapidly during the sixties and seventies. The number of convenience stores will probably continue to grow, but more slowly. These stores represented 6 percent of all grocery sales in 1982, but their percentage of total meat sales was probably much smaller. Most convenience stores handle only a small assortment of processed meat products and no fresh meat. Detailed data by region or area of the country are available in such annual publications as Progressive Grocer's Marketing Guidebook. Concentration data (how many firms handle how much of the business) by region and area are also available.

Table 11--Market share of 20 leading grocery chains 1/

^{1/} Data for 1954-77 are from (11). Estimates for 1980-81 are based on (1). Table development was by Charles R. Handy, National Economics Division, Economic Research Service, U.S. Department of Agriculture.

Table 12--Supermarket density, by State, 1981

| State | Supermarkets per 100,000 people | State | Supermarkets per 100,000 people |
|----------------|------------------------------------|----------------------|------------------------------------|
| | <u>Number</u> | | <u>Number</u> |
| Wyoming | 17.3 | West Virginia | 12.7 |
| Idaho | 17.0 | Louisiana | 12.6 |
| Washington | 16.2 | Nebraska | 12.6 |
| North Carolina | 16.1 | | |
| South Carolina | 16.0 | Tennessee | 12.6 |
| | | Maine | 12.5 |
| Nevada | 16.0 | California | 12.4 |
| Oregon | 15.8 | South Dakota | 12.4 |
| Alaska | 15.8 | Connecticut | 12.2 |
| Arizona | 15.2 | | |
| Georgia | 14.8 | Delaware | 12.2 |
| | | Maryland | 12.0 |
| Vermont | 14.6 | Ohio | 11.9 |
| Kentucky | 14.5 | Pennsylvania | 11.7 |
| Texas | 14.4 | Hawaii | 11.5 |
| Wisconsin | 14.3 | | |
| Oklahoma | 14.1 | Minnesota | 11.5 |
| | | New Mexico | 11.0 |
| Utah | 14.0 | Illinois | 10.9 |
| Kansas | 13.8 | Michigan | 10.5 |
| Arkansas | 13.7 | Colorado | 10.4 |
| Florida | 13.7 | | |
| Alabama | 13.5 | New York | 10.3 |
| | | Massachusetts | 9.9 |
| Montana | 13.5 | North Dakota | 9.7 |
| Virginia | 13.5 | New Jersey | 9.6 |
| Mississippi | 13.2 | Rhode Island | 9.1 |
| New Hampshire | 13.2 | | |
| Indiana | 13.0 | District of Columbia | 6.8 |
| | | | |
| Missouri | 13.0 | United States | 12.6 |
| Iowa | 12.9 | | |
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Source: (8, Apr. 1982 issue).

population is generally found in the less populous States. Although the change in size required to be a supermarket (changed to \$2 million for 1981 data) affects density, large store density is increasing.

Sales of fresh meat, poultry, and provisions have accounted for about 21 percent of total grocery store sales during the past 10 years (table 7). As a percentage of total sales, meat department sales were 25.0 percent in 1960, 24.9 percent in 1970, and 21.5 percent in 1980, according to Progressive Grocer, a trade publication. Another similar measure of the importance of meat to grocery stores is the percentage of meat sales (using only fresh meat, poultry, and provisions) in relation to total food sales in grocery stores, which was 27.85 percent in 1981 (9). Meat is definitely an important part of grocery store sales and will remain so.

Beef sales increased from 1972 to 1981 (table 7), an increase which stemmed from higher beef prices, as consumption decreased significantly between 1976 and 1981. Sales of lamb, veal, and provisions decreased, but sales of fresh pork and poultry remained fairly stable. Poultry consumption increased during the 1972-81 period, and meat consumption declined; however, price changes resulted in a higher percentage of fresh meat sales in relation to poultry sales.

Gross margins for retail grocery chains have been nearly constant at about 22 percent for the past 20 years. Gross meat margins, while fluctuating somewhat, have declined slightly since 1969. They were estimated to be 22.4 percent in 1969 and 20.9 percent in 1980 (4). In 1981, the gross meat margin was 20.5 percent. These estimates originally came from Chain Store Age, a trade publication. The decline may result partly from the shift to breaking beef carcasses prior to shipment to the retail store, which means somewhat less labor and lower retail costs. Gross margins for meat are slightly lower than those for grocery stores as a whole, which is the opposite of what would be expected as fresh meat items are normally cut and packaged in the local store by relatively high-paid employees. Meat must also be refrigerated, and shelf life is short. The lower gross margin may be related to the extensive use of meat in advertising and to the belief of many retailers that the quality and price of meats sold are the major criteria many consumers use in choosing stores.

Retail grocery stores will continue to be fewer and larger, but the number of convenience stores will continue to increase, although more slowly than in recent years. Chain stores will continue to grow in importance in relation to independents, but more slowly. Competition will remain strong at the national level, although concentration in some markets may increase. Meat will remain an important product in grocery stores.

These changes will not affect the amount or price of meat sold. Convenience stores will probably sell a somewhat higher proportion of meat in the form of frozen meat and meat used in

sandwiches. Supermarkets will continue to supply most meat for at-home consumption. The trend toward greater away-from-home consumption of food does affect grocery store meat sales, but not out of proportion to sales of other food items.

FOOD SERVICE OPERATIONS

The food service industry, with more than 500,000 establishments, represents a major market for U.S. livestock products. Data indicate that 55 percent of the dollars consumers spend for beef is through the food service industry (table 1). This consumer expenditure is larger than the actual poundage of beef movement through the food service system because more service is included in food service beef, raising the price per pound. The away-from-home market percentage of the farm value is a better measure of quantity; for beef, this figure was 27 percent in 1981. Pork estimates were 30 percent of the consumer food dollar and 20 percent of the farm value or approximate quantity (table 1).

In 1982, Americans spent \$137 billion, or about 39 percent of their food dollars, away from home. This amount is up from 27 percent in 1960 (table 13). The menu specialty of most food service outlets is usually either a meat product or contains a meat product (fig. 2). Meals in restaurants are usually ordered by the type of meat desired; other types of food come with an order. Food service firms generally sell a mixture of foods (a meal) at a given price; even a fast food hamburger includes the bun, catsup, and lettuce. Thus, data are not available on sales of individual products. Data are available, however, on purchases of specific products by food service firms. In 1982, Michael Van Dress indicated that beef represented 7.1 percent of all food service products purchased by weight and that pork represented 2.4 percent (13). These figures do not include foods included in a mixture such as hot dogs, soups, and prepared sandwiches; and the report does not break out costs by product. In his 1971 publication, Van Dress examines product costs (price times quantity). For 1969, he lists beef as accounting for 21.9 percent of food costs for the food service industry and pork accounting for 9.9 percent (14). If the cost of meat products is about a third of the food cost, a third or more of food sales is probably attributable to meat, as the emphasis is often on the meat selection.

The institutional sector of the food service industry accounts for about 25 percent of the retail value of all food consumed away from home. The percentage of meat is assumed to be about the same. Schools account for about 7 percent and hospitals for 4 percent; together they represent nearly half the institutional sector. Other institutions might include sanitariums and homes for children. The remaining 75 percent of the food service industry, the public eating sector, can again be divided into 75 percent and 25 percent. The former are composed of separate entities which derive revenue mainly from sales of meals and snacks. The latter are public eating places which are part of

larger facilities whose food service sales are less than other revenues (for example, a bowling alley snack bar or a department store coffee shop) (15). Eating places that are separate entities and that derive revenue mainly from the sale of meals and snacks make up the Standard Industrial Classification (SIC) 5812 group. They account for 56 percent of the retail value of all food (and probably also meat) consumed away from home.

Both the public and institutional sectors of the away-from-home market have grown, but fast foods in the public sector have grown most dramatically. Fast food growth has substantially exceeded population and income increases (table 14). 4/ Since

Table 13--Expenditures for food eaten away from home

| Year | : | Meals and snacks consumed | | |
|-------|---|---------------------------|------------------------|---------|
| | : | away from home | | |
| | : | Sales | Donations and supplied | Total |
| | : | : | 1/ | : |
| <hr/> | | | | |
| | : | Million dollars | | |
| 1960 | : | 16,191 | 3,359 | 19,550 |
| 1965 | : | 22,115 | 4,018 | 26,133 |
| 1970 | : | 33,677 | 5,721 | 39,398 |
| 1971 | : | 35,892 | 6,155 | 42,047 |
| 1972 | : | 39,346 | 6,641 | 45,987 |
| 1973 | : | 44,525 | 7,506 | 52,031 |
| 1974 | : | 49,677 | 8,887 | 58,564 |
| 1975 | : | 57,015 | 9,911 | 66,926 |
| 1976 | : | 64,487 | 10,778 | 75,265 |
| 1977 | : | 71,495 | 11,464 | 82,959 |
| 1978 | : | 80,730 | 12,715 | 93,445 |
| 1979 | : | 91,576 | 14,300 | 105,876 |
| 1980 | : | 99,875 | 15,878 | 115,753 |
| 1981 | : | 109,039 | 16,919 | 125,958 |
| 1982 | : | 119,198 | 17,820 | 137,018 |

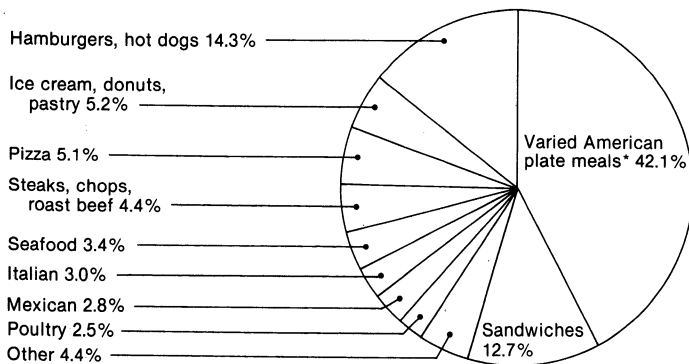
1/ Refers to food supplied by airlines, institutions, hospitals, boarding houses, fraternities and sororities, civic and social organizations, military forces, and meals furnished to employees.

Source: (6, as updated by memorandum).

4/ Unpublished material developed by Michael G. Van Dress, National Economics Division, Economic Research Service, U.S. Department of Agriculture.

Figure 2

Establishments with Food Service: Distribution by Menu Specialty, United States, 1979



Figures may not add to 100% because of rounding.

*Usually a meat, poultry, or fish entree, a vegetable or grain, and a salad or serving of fruit.

Source: (13).

Table 14--Constant dollar sales of eating places, selected years, 1/

| Type of food service | 1967 | 1972 | 1977 | 1982 | Percentage change, 1967-82 |
|--------------------------------|-----------------|--------|--------|--------|----------------------------|
| | Million dollars | | | | Percent |
| Fast food places | 3,418 | 6,784 | 10,223 | 11,069 | 223.8 |
| Restaurants, cafeterias, other | 14,537 | 15,576 | 16,939 | 17,533 | 20.6 |
| Total | 17,955 | 22,360 | 27,162 | 28,602 | 59.3 |

1/ Data are presented in constant dollars based on 1967 = 100. Eating places (SIC 5812 with payroll) are retail establishments that derive most of their revenue from sales of prepared meals and snacks for on-premise or immediate consumption. Eating facilities which are subordinate parts of other businesses (for example, bowling alley snack bars) are excluded unless they are leased to and run by outside operators.

Source: (11, 1967-77). The 1982 figures are preliminary estimates of the Economic Research Service, U.S. Department of Agriculture.

the early to midsixties, total industry sales and fast food sales have increased at compound annual rates of 10 percent and 16 percent, respectively. Fast food establishments specialize in hamburgers, fried chicken, and other limited menu entrees and snacks. Food service chains--firms with 11 or more outlets--are growing in importance, but single-unit firms still have more outlets and a greater percentage of sales. However, shares in both categories are declining rapidly (table 15). Single units accounted for 80 percent of sales in 1963, 66 percent in 1972, and 53 percent in 1982. Chains gained most of the market share lost by single-unit firms, increasing their share from 11 percent in 1963 to about 33 percent in 1982.

Not all food service chain outlets are listed as chains, however; some are classified as single-unit firms. These are franchises. Retail groceries are divided into chain and independent outlets. Some independent stores are affiliated with a wholesale operation, carrying the wholesaler's name and product brands. An independent food service outlet may be a franchise and use the franchiser's trademarks, uniform identification symbols and storefronts, and standardized products and prices. Franchising allows the parent firm to expand its operations with limited capital investment, and it allows outlet owners to invest their own funds and be more than simply managers. Consumers may not know whether they are buying from a chain outlet or from a franchised independent outlet of the franchised firm. A franchised McDonald's outlet, for example, looks very much like a chain-owned McDonald's outlet. About 60 percent of franchised outlets offer fast food service; 30 percent offer table or booth service; and 5 percent offer counter service. The number of franchised outlets increased from 33,000 in 1970 to 60,000 in 1980. Thus, the shift to chains would be considerably larger if all franchised outlets were classed as chains rather than only those outlets owned by the franchised chain (table 15).

Growth of the fast food industry originally increased sales of ground beef more than those of other meats. This sales increase has slowed as fast food outlets have added other meat and poultry products to their menus. Fast food firms and chains have led to greater uniformity and consistency of quality in food service across America. Hamburgers bought in New York or in Los Angeles are essentially the same, particularly if purchased from the same fast food chain. Food service firms also tend to buy meat products that have already been cut, trimmed, weighed, wrapped individually, and, in some cases, even cooked. Portion-controlled and frozen meats have increased. Formed steaks and meats combined with other foods, like beef stroganoff or lasagna, are now purchased by food service firms. Many of these products are fully prepared and need only to be heated in a microwave oven.

Van Dress estimates that in 1979 food service outlets served about 170 million persons daily (13). Most of these ate a meat product. Growth in away-from-home eating has been spurred by rising per capita income, more multiple-earner households,

Table 15--Percentage of eating places and percentage of their sales,
by type of food service and firm size 1/

| Establishment and size | : | : | : | : | : |
|---------------------------|--|------|------|------|------|
| | 1963 | 1967 | 1972 | 1977 | 1982 |
| Firm type: | <u>Percent of establishments</u> | | | | |
| Fast food eating places | 21.9 | 28.8 | 37.5 | 42.3 | 45.3 |
| Others | 78.1 | 71.2 | 62.5 | 57.7 | 54.7 |
| | <u>Percent of sales</u> | | | | |
| Fast food eating places | 14.6 | 19.0 | 30.3 | 37.6 | 38.7 |
| Others | 85.4 | 81.0 | 69.7 | 62.4 | 61.3 |
| | <u>Sales per establishment (1,000 dollars)</u> | | | | |
| Fast food eating places | 49 | 63 | 114 | 204 | 280 |
| Others | 81 | 108 | 156 | 247 | 367 |
| Firm size: <u>2/</u> | <u>Percent of establishments</u> | | | | |
| Single unit | 90.8 | 90.4 | 85.3 | 80.0 | 76.4 |
| 2 to 3 units | 4.0 | 3.0 | 4.0 | 3.9 | 3.9 |
| 4 to 10 units | 1.4 | 1.6 | 2.4 | 3.3 | 3.9 |
| 11 or more units | 3.8 | 5.1 | 8.4 | 12.8 | 15.8 |
| | <u>Percent of sales</u> | | | | |
| Single units | 80.4 | 77.4 | 65.9 | 59.5 | 52.5 |
| 2 to 3 units | 5.8 | 5.3 | 6.3 | 6.8 | 7.1 |
| 4 to 10 units | 2.9 | 3.7 | 4.7 | 6.1 | 7.2 |
| 11 or more units | 11.0 | 13.6 | 23.2 | 27.6 | 33.2 |
| | <u>Sales per establishment (1,000 dollars)</u> | | | | |
| Single units | 55 | 68 | 93 | 146 | 225 |
| 2 to 3 units | 91 | 142 | 189 | 340 | 601 |
| 4 to 10 units | 127 | 185 | 238 | 364 | 599 |
| 11 or more units | 180 | 214 | 332 | 425 | 688 |

1/ Eating places (SIC 5812 with payroll) are retail establishments that derive most of their revenue from sales of prepared meals and snacks for on-premise or immediate consumption. Eating facilities which are subordinate parts of other kinds of businesses (for example, a hotel restaurant or bowling alley snack bar) are excluded unless they are leased to and run by outside operators.

2/ Prior to 1972, firm size was based on the number of outlets operated by the same firm in the "same general kinds of business" rather than on the "same business" as in 1972 and subsequent years.

Source: (11, 1963-77). The 1982 figures are preliminary estimates of the Economic Research Service, U.S. Department of Agriculture.

smaller households, a more mobile populace, and the national preference for greater convenience. Growth rates do tend to slow as industries mature, and there are indications that food service may be approaching this point, although individual firms may grow substantially. Recent economic conditions have also slowed away-from-home consumption. Higher menu prices, combined with increased costs of other goods and services consumers must buy, may have slowed the growth of the food service industry. In fact, sales at SIC 5812 eating places actually declined in 1980, after adjustment for inflation. Real sales in the first half of 1982 were up slightly from those a year earlier, but were still below the 1979 sales level.

Concentration in the food service industry as a whole does not seem a problem. The fast food segment appears more concentrated, but competition seems quite high. McDonald's is the largest food industry firm and fast food firm, with sales over \$7 billion in 1981.

As the geographic area considered decreases in size, concentration becomes a greater problem. However, there are few barriers to new firms opening outlets, and an established firm cannot exercise much monopoly power with new firms coming in to compete. Institutional outlets often do have a captive clientele.

For the reader interested in more detail, the National Restaurant Association provides estimates of the numbers of U.S. food service units for over 35 types of firms. It also breaks down data by States for four types of firms (7).

The food service industry trend toward more chain outlets and fewer independent outlets is expected to continue but at a declining rate. As this change occurs, firm size will also increase. Competition, particularly with a weakened economy, appears to be intensifying, and advertisements are increasing. Chains and independents serve about the same proportion of meat in relation to that of other foods.

Food service industry growth in relation to that of the grocery industry has slowed, but is expected to continue to grow, particularly as the economy picks up. The meat industry must innovate to accommodate this growth. The meat industry is, of course, interested in the total demand for meat products, rather than in food service or grocery sales separately. Thus, its goals are new or improved products to meet consumer demand, as established cuts and methods continue to be favored.

IMPLICATIONS

The move to boxed beef and boxed pork will continue and will influence overall meat distribution procedures and the structure of the meat distribution system. More meat will move directly from slaughterer-processor to retail firm. This change results partly from improved communication and partly from increased size of retail firms. Larger firms can buy by the truckload, and they can warehouse and deliver meat and other products to

individual grocery stores or food service outlets more efficiently. Wholesale firms must face the fact that more meat is now being cut and processed at the slaughtering-processing plant and that more direct sales from packer to final outlet will continue. Thus, wholesalers must carve a niche for themselves or must face a smaller demand for their services. Wholesale meat firms that do continue may also shift to a strictly distributor role (and not cut or break meat).

Both grocery and food service stores are becoming larger, and the percentage of total sales handled by chain operations is increasing. Independents have tended to become associated with wholesalers or supplying organizations. Most independent grocers are now affiliated with wholesalers, and independent food service outlets can join franchising firms. Both grocery stores and food service firms will continue to hold substantial market shares. Internal trends within these sectors (those affecting size and ownership) will continue, however. Firms will have to be innovative and efficient to remain viable.

Away-from-home food consumption has increased in relation to consumption of food bought at grocery stores and will probably continue to increase, but at a slower rate. The gradual shift to away-from-home eating will not affect the wholesale industry as much as it did in the past. First, the change is gradual; and second, the trend occurring would be toward larger firms that already tend to buy directly and perform their own wholesaling function. The general economic slowdown is a part of the cause for the recent slowdown in away-from-home eating. Grocery stores now sell more convenience foods for at-home consumption, which helps to slow the trend to away-from-home consumption. Grocery stores have also entered the away-from-home eating market.

Per capita consumption of meat will not continue to grow as fast as in recent decades. Red meat consumption seems to have reached a plateau. Although cycles will cause some variations in annual beef and pork consumption, overall growth will probably be related solely to population growth. Thus, changes within the meat distribution system will mean that when a particular activity increases, there will be a corresponding decrease somewhere else in the system.

REFERENCES

- (1) American Institute of Food Distribution. Weekly Digest. Fair Lawn, N.J., June 28, 1980, Feb. 27, 1982, and July 3, 1982.
- (2) Baker, Allen J., and Lawrence A. Duewer. Patterns of Meat Distribution in Six Southern Metro Areas. AER-498. U.S. Dept. of Agr., Econ. Res. Serv., Apr. 1983.
- (3) Dunham, Dennis. Developments in Farm to Retail Price Spreads for Food Products in 1981. AER-488. U.S. Dept. of Agr., Econ. Res. Serv., Sept. 1982.
- (4) Food Marketing Institute. Food Marketing Outlook: A Look at Prices, Profits, and Issues in Food Distribution. Washington, D.C., 1982.
- (5) Grinnell, Gerald E., Russell C. Parker, and Lawrence A. Rens. Grocery Retailing Concentration in Metropolitan Areas, Economic Census Years, 1954-72. Fed. Trade Comm. and U.S. Dept. of Agr., 1979.
- (6) Manchester, Alden C., and Richard A. King. U.S. Food Expenditures, 1954-78. AER-431. U.S. Dept. of Agr., Econ. Res. Serv., Aug. 1978.
- (7) National Restaurant Association. Foodservice Sales Panorama (Featuring Foodservice Industry Food and Drink Sales 1970-80). Washington, D.C., 1981.
- (8) Progressive Grocer. Annual Report of the Grocery Industry. Apr. 1966-83.
- (9) Supermarket Business. Sept. 1982.
- (10) Supermarketing. Sept. 1975, Sept. 1977.
- (11) U.S. Department of Commerce, Bureau of the Census. Census of Business. 1929-77.
- (12) _____. Census of Wholesale Trade. 1963, 1972, and 1977.
- (13) Van Dress, Michael G. The Foodservice Industry: Structure, Organization, and Use of Food, Equipment, and Supplies. SB-690. U.S. Dept. of Agr., Econ. Res. Serv., Sept. 1983.
- (14) _____. The Foodservice Industry: Type, Quantity, and Value of Foods Used. SB-476. U.S. Dept. of Agr., Econ. Res. Serv., Nov. 1971.
- (15) _____, and Judith Jones Putnam. "American Eating Places," National Food Review. NFR-21. U.S. Dept. of Agr., Econ. Res. Serv., Winter 1983.

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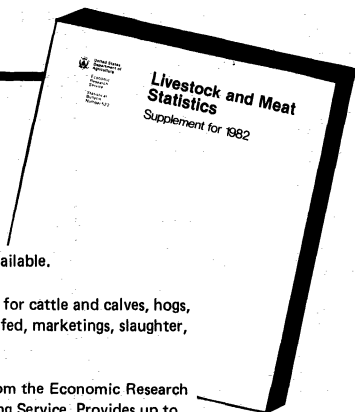
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